

### **REMARKS**

In this Amendment, Applicant has cancelled Claims 2, 4 and 7 – 11, without prejudice and disclaimer, and amended Claims 1, 3, 5 and 6. Claim 1 has been amended to overcome the rejections and further specify the embodiments of the present invention. Claims 3, 5 and 6 have been amended to proper dependent form. It is respectfully submitted that no new matter has been introduced by the amended claims. All claims are now present for examination and favorable reconsideration is respectfully requested in view of the preceding amendments and the following comments.

#### **REJECTIONS UNDER 35 U.S.C. § 102:**

Claims 1 and 3 – 6 have been rejected under 35 U.S.C. § 102 (e) as allegedly being anticipated by Dixon et al. (US 6,275,704), hereinafter Dixon.

Applicant traverses the rejection and respectfully submits that the present-claimed invention is not anticipated by the cited reference. At first, Claim 4 has been cancelled without prejudice or disclaimer. In addition, Claim 1 has been amended to further specify that “each base station uses plural frequencies in each cell and is divided into two or more sectors.” Claims 3, 5 and 6 also include this feature due to their dependency on Claim 1.

The embodiments of the present invention as defined in amended claims are different from the disclosure in Dixon. Dixon shows a radio system that divides a certain region into two or more cells and installs a base station at about the center of each cell to carry out communication between the base station and many fixed terminal stations in the cell in which the base station is installed. According to Dixon, each base station is divided into two or more sectors, each of which is provided with an antenna different in directivity on a horizontal plane. The antennas are placed in a manner so that the antenna beams cover all the directions on the horizontal plane as a whole. In addition, all the

antennas using the same frequency and the same polarized wave are arranged in a manner to face in about the same direction.

In addition, Dixon discloses that each cell is divided into a plurality of sectors and each sector has an antenna associated with a polarization characteristic, such as left hand circular polarization (L) and right hand circular polarization (R). However, each base station in the Dixon's radio system uses only one frequency in each cell, such as shown in Fig. 3 and as described "signals are sent and received over the same frequency F1 for all of the sectors 307 in a given cell 303" in col.4, line 19-21. In fact, Dixon discloses a radio system which has a base station in every cell, wherein each base station uses only one frequency and does not use plural frequencies in each cell.

On the contrary, it is respectfully submitted that the embodiments of present invention as claimed provide "a radio system that divides a certain region into two or more cells and installs a base station at about the center of each cell to carry out communication between the base station and many fixed terminal stations in the cell in which the base station is installed, wherein each base station uses plural frequencies in each cell and is divided into two or more sectors, each of which is provided with an antenna different in directivity on a horizontal plane, the antennas are placed in a manner so that the antenna beams cover all the directions on the horizontal plane as a whole, and all the antennas using the same frequency and the same polarized wave are arranged to face in about the same direction." Therefore, the radio system of the embodiments of present invention as claimed make it possible to prevent the occurrence of interference between base stations, and between subscriber stations. Further, the radio system of the embodiments of present invention as claimed make it possible to save the utilization of frequency resources.

Therefore, the embodiments of the present invention as claimed are different from Dixon, and they have components and effects which are not disclosed nor taught in Dixon.

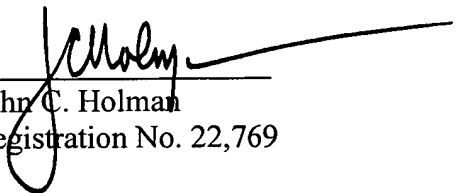
In summary, the newly presented claims are not anticipated by Dixon and the rejection under 35 U.S.C. § 102 (e) has been overcome. Accordingly, withdrawal of the rejections under 35 U.S.C. § 102 (e) is respectfully requested.

Having overcome all outstanding grounds of rejection, the application is now in condition for allowance, and prompt action toward that end is respectfully solicited.

Respectfully submitted,

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